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**APPENDIX A: MARKED CLAIMS AS AMENDED IN U.S. SER. NO. 09/669,301**

1. (Amended) A method comprising:

- a) obtaining at least a first anti-nuclease [inhibitor]antibody;
- b) obtaining at least a second anti-nuclease [inhibitor]antibody;
- c) obtaining a composition; and
- d) admixing the anti-nuclease [inhibitors]antibodies and the composition to form an admixture;

wherein nucleases that may be present in the [composition]admxiture are inhibited.

2. (Amended) The method of claim 1, wherein admixing is further defined as comprising mixing the first and second anti-nuclease [inhibitors]antibodies to form a nuclease inhibitor cocktail and mixing the nuclease inhibitor cocktail with the composition.

3. (Amended) The method of claim 1, wherein obtaining the first and second anti-nuclease [inhibitors]antibodies comprises obtaining a nuclease inhibitor cocktail comprising the first anti-nuclease [inhibitor]antibody and the second anti-nuclease [inhibitor]antibody.

4. (Amended) The method of claim 1, wherein the [composition]admxiture comprises at least one nuclease.

5. (Amended) The method of claim 1, wherein the [composition]admxiture comprises RNA.

6. (Amended) The method of claim 1, wherein the [composition]admxiture is further defined as an in vitro translation reaction mixture, a transcription reaction mixture, a reverse transcription reaction mixture, or a coupled transcription/translation reaction mixture.

7. (Amended) The method of claim 1, wherein the composition is a reagent used in

molecular biology.

8. (Cancelled)

9. (Amended) The method of claim [8,]1, wherein the first anti-nuclease antibody is a polyclonal antibody.

10. (Amended) The method of claim [8,]1, wherein the first anti-nuclease antibody is an anti-ribonuclease antibody.

11. (Amended) The method of claim 10, wherein the first anti-ribonuclease antibody [is capable of binding]binds to one or more of RNase A, a member of the RNase A family, RNase B, RNase C, RNase 1, RNase T1, RNase T2, RNase L, a member of the RNase H family, a member of the angiogenin RNase family, eosinophil RNase, a micrococcal nuclease, a member of the mammalian ribonuclease 1 family, a member of the ribonuclease 2 family, a messenger RNA ribonuclease, 5'-3' exoribonuclease, 3'-5' exoribonuclease, a decapping enzyme, a deadenylase, RNase P, RNase III, RNase E, RNase I,I\*, RNase HI, RNase HII, RNase M, RNase R, RNase IV, F; RNase P2,O, PIV, PC, RNase N, RNase II, PNase, RNase D, RNase BN, RNase T, RNase PH, OligoRNase, RNase R, RNase Sa, RNase F1, RNase U2, RNase Ms, or RNase St.

12. (Amended) The method of claim 10, wherein the first anti-ribonuclease antibody is an anti-RNase A antibody and the second anti-ribonuclease antibody is an anti-RNase 1 antibody.

13. (Amended) The method of claim 10, wherein the first anti-ribonuclease antibody is an anti-RNase 1 antibody and the second anti-ribonuclease antibody is an anti-RNase T1 antibody.

14. (Amended) The method of claim 10, wherein the first anti-ribonuclease antibody is an anti-RNase T1 antibody and the second anti-ribonuclease antibody is an anti-RNase A antibody.

15. (Amended) The method of claim [8,]1, wherein the first anti-nuclease antibody is an anti-deoxyribonuclease antibody.

16. (Amended) The method of claim [8,]1, wherein the first anti-nuclease antibody [is capable of binding]binds to S1 nuclease or micrococcal nuclease.
17. (Cancelled)
18. (Amended) The method of claim [17,]1, wherein at least a third anti-nuclease antibody is obtained and admixed with the first and second anti-nuclease antibodies and the composition.
19. The method of claim 18, comprising obtaining at least an anti-RNase A antibody, an anti-RNase 1 antibody, and an anti-RNase T1 antibody and admixing them with the composition.
20. (Amended) The method of claim 1, comprising obtaining a nuclease inhibitor and admixing the nuclease inhibitor with the composition wherein the[ second] nuclease inhibitor is human placental ribonuclease inhibitor, a bovine ribonuclease inhibitor, a porcine ribonuclease inhibitor, diethyl pyrocarbonate, ethanol, formamide, guanidinium thiocyanate, vanadyl-ribonucleoside complexes, macaloid, sodium dodecyl sulfate, ethylenediamine tetraacetic acid, proteinase K, heparin, hydroxylamine-oxygen-cupric ion, bentonite, ammonium sulfate, dithiothreitol, β-mercaptoethanol, cysteine, dithioerythritol, tris (2-carboxyethyl) phosphine hydrochloride, Mg<sup>+2</sup>, Mn<sup>+2</sup>, Zn<sup>+2</sup>, Fe<sup>+2</sup>, Ca<sup>+2</sup>, or Cu<sup>+2</sup>.
21. The method of claim 20, wherein the nuclease inhibitor is human placental ribonuclease inhibitor.
22. (Cancelled).
23. (Amended) The method of claim 1, further defined as a method of inhibiting nucleases in the [composition]admixture.
37. A method of performing *in vitro* translation comprising obtaining a first nuclease inhibitor, which inhibitor is further defined as an anti-nuclease antibody, and placing the anti-nuclease antibody in an *in vitro* translation reaction.

38. The method of claim 37, wherein the *in vitro* translation reaction comprises at least one nuclease.
39. The method of claim 37, wherein the *in vitro* translation reaction comprises RNA.
40. The method of claim 37, wherein the *in vitro* translation reaction is further defined as a transcription/translation reaction.
41. The method of claim 40, wherein the *in vitro* translation reaction comprises both DNA and RNA.
42. The method of claim 37, wherein the anti-nuclease antibody is a anti-ribonuclease antibody.
43. The method of claim 37, wherein the anti-nuclease antibody is an anti-deoxyribonuclease antibody.
44. (Amended) The method of claim 37, wherein the anti-nuclease antibody [is capable of binding]binds to S1 nuclease or micrococcal nuclease.
45. The method of claim 37, further comprising obtaining a second nuclease inhibitor and placing the second nuclease inhibitor in the *in vitro* translation reaction.
46. (Amended) The method of claim 45, further defined as comprising obtaining a nucle[ic]ase inhibitor cocktail comprising at least the anti-nuclease antibody and the second nuclease inhibitor and placing the cocktail in the *in vitro* translation reaction.
47. The method of claim 45, wherein the second nuclease inhibitor is a second anti-nuclease antibody.
48. The method of claim 45, wherein the second nuclease inhibitor is human placental ribonuclease inhibitor, a bovine ribonuclease inhibitor, a porcine ribonuclease inhibitor, diethyl

pyrocarbonate, ethanol, formamide, guanidinium thiocyanate, vanadyl-ribonucleoside complexes, macaloid, sodium dodecyl sulfate, ethylenediamine tetraacetic acid, proteinase K, heparin, hydroxylamine-oxygen-cupric ion, bentonite, ammonium sulfate, dithiothreitol,  $\beta$ -mercaptoethanol, cysteine, dithioerythritol, tris (2-carboxyethyl) phosphene hydrochloride,  $Mg^{+2}$ ,  $Mn^{+2}$ ,  $Zn^{+2}$ ,  $Fe^{+2}$ ,  $Ca^{+2}$ , or  $Cu^{+2}$ .

49. The method of claim 37, further defined as obtaining a lysate and employing the lysate in the *in vitro* translation reaction.

51. (New) The method of claim 18, wherein the third anti-nuclease antibody binds to one or more of RNase A, a member of the RNase A family, RNase B, RNase C, RNase 1, RNase T1, RNase T2, RNase L, a member of the RNase H family, a member of the angiogenin RNase family, eosinophil RNase, a micrococcal nuclease, a member of the mammalian ribonuclease 1 family, a member of the ribonuclease 2 family, a messenger RNA ribonuclease, 5'-3' exoribonuclease, 3'-5' exoribonuclease, a decapping enzyme, a deadenylase, RNase P, RNase III, RNase E, RNase I,I\*, RNase HI, RNase HII, RNase M, RNase R, RNase IV, F; RNase P2,O, PIV, PC, RNase N, RNase II, PNPase, RNase D, RNase BN, RNase T, RNase PH, OligoRNase, RNase R, RNase Sa, RNase F1, RNase U2, RNase Ms, or RNase St.

52. (New) The method of claim 47, further comprising obtaining at least a third anti-nuclease antibody and placing the at least a third anti-nuclease antibody in the *in vitro* translation reaction.

53. (New) The method of claim 52, wherein the third anti-nuclease antibody binds to one or more of RNase A, a member of the RNase A family, RNase B, RNase C, RNase 1, RNase T1, RNase T2, RNase L, a member of the RNase H family, a member of the angiogenin RNase family, eosinophil RNase, a micrococcal nuclease, a member of the mammalian ribonuclease 1 family, a member of the ribonuclease 2 family, a messenger RNA ribonuclease, 5'-3' exoribonuclease, 3'-5' exoribonuclease, a decapping enzyme, a deadenylase, RNase P, RNase III, RNase E, RNase I,I\*, RNase HI, RNase HII, RNase M, RNase R, RNase IV, F; RNase P2,O, PIV, PC, RNase N, RNase II, PNPase, RNase D, RNase BN, RNase T, RNase PH, OligoRNase, RNase R, RNase Sa, RNase F1, RNase U2, RNase Ms, or RNase St.

54. (New) The method of claim 52, wherein the at least a first anti-ribonuclease antibody is

an anti-RNase A antibody, the at least a second anti-ribonuclease antibody is an anti-RNase 1 antibody, and the at least a third anti-ribonuclease antibody is an anti-RNase T1 antibody.

55. (New) The method of claim 5, wherein the RNA is produced in the admixture.



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**APPENDIX B: CLAIMS AS AMENDED IN U.S. SER. NO. 09/669,301**

1. A method comprising:
  - a) obtaining at least a first anti-nuclease antibody;
  - b) obtaining at least a second anti-nuclease antibody;
  - c) obtaining a composition; and
  - d) admixing the anti-nuclease antibodies and the composition to form an admixture;  
wherein nucleases that may be present in the admixture are inhibited.
2. The method of claim 1, wherein admixing is further defined as comprising mixing the first and second anti-nuclease antibodies to form a nuclease inhibitor cocktail and mixing the nuclease inhibitor cocktail with the composition.
3. The method of claim 1, wherein obtaining the first and second anti-nuclease antibodies comprises obtaining a nuclease inhibitor cocktail comprising the first anti-nuclease antibody and the second anti-nuclease antibody.
4. The method of claim 1, wherein the admixture comprises at least one nuclease.
5. The method of claim 1, wherein the admixture comprises RNA.
6. The method of claim 1, wherein the admixture is further defined as an *in vitro* translation reaction mixture, a transcription reaction mixture, a reverse transcription reaction mixture, or a coupled transcription/translation reaction mixture.
7. The method of claim 1, wherein the composition is a reagent used in molecular biology.
8. (Cancelled)

9. The method of claim 1, wherein the first anti-nuclease antibody is a polyclonal antibody.
10. The method of claim 1, wherein the first anti-nuclease antibody is an anti-ribonuclease antibody.
11. The method of claim 10, wherein the first anti-ribonuclease antibody binds to one or more of RNase A, a member of the RNase A family, RNase B, RNase C, RNase 1, RNase T1, RNase T2, RNase L, a member of the RNase H family, a member of the angiotensin RNase family, eosinophil RNase, a micrococcal nuclease, a member of the mammalian ribonuclease 1 family, a member of the ribonuclease 2 family, a messenger RNA ribonuclease, 5'-3' exoribonuclease, 3'-5' exoribonuclease, a decapping enzyme, a deadenylase, RNase P, RNase III, RNase E, RNase I,I\*, RNase HI, RNase HII, RNase M, RNase R, RNase IV, F; RNase P2,O, PIV, PC, RNase N, RNase II, PNPase, RNase D, RNase BN, RNase T, RNase PH, OligoRNase, RNase R, RNase Sa, RNase F1, RNase U2, RNase Ms, or RNase St.
12. The method of claim 10, wherein the first anti-ribonuclease antibody is an anti-RNase A antibody and the second anti-ribonuclease antibody is an anti-RNase 1 antibody.
13. The method of claim 10, wherein the first anti-ribonuclease antibody is an anti-RNase 1 antibody and the second anti-ribonuclease antibody is an anti-RNase T1 antibody.
14. The method of claim 10, wherein the first anti-ribonuclease antibody is an anti-RNase T1 antibody and the second anti-ribonuclease antibody is an anti-RNase A antibody.
15. The method of claim 1, wherein the first anti-nuclease antibody is an anti-deoxyribonuclease antibody.
16. The method of claim 1, wherein the first anti-nuclease antibody binds to S1 nuclease or micrococcal nuclease.

17. (Cancelled)
18. The method of claim 1, wherein at least a third anti-nuclease antibody is obtained and admixed with the first and second anti-nuclease antibodies and the composition.
19. The method of claim 18, comprising obtaining at least an anti-RNase A antibody, an anti-RNase 1 antibody, and an anti-RNase T1 antibody and admixing them with the composition.
20. The method of claim 1, comprising obtaining a nuclease inhibitor and admixing the nuclease inhibitor with the composition wherein the nuclease inhibitor is human placental ribonuclease inhibitor, a bovine ribonuclease inhibitor, a porcine ribonuclease inhibitor, diethyl pyrocarbonate, ethanol, formamide, guanidinium thiocyanate, vanadyl-ribonucleoside complexes, macaloid, sodium dodecyl sulfate, ethylenediamine tetraacetic acid, proteinase K, heparin, hydroxylamine-oxygen-cupric ion, bentonite, ammonium sulfate, dithiothreitol,  $\beta$ -mercaptoethanol, cysteine, dithioerythritol, tris (2-carboxyethyl) phosphene hydrochloride,  $Mg^{+2}$ ,  $Mn^{+2}$ ,  $Zn^{+2}$ ,  $Fe^{+2}$ ,  $Ca^{+2}$ , or  $Cu^{+2}$ .
21. The method of claim 20, wherein the nuclease inhibitor is human placental ribonuclease inhibitor.
22. (Cancelled).
23. The method of claim 1, further defined as a method of inhibiting nucleases in the admixture.
37. A method of performing *in vitro* translation comprising obtaining a first nuclease inhibitor, which inhibitor is further defined as an anti-nuclease antibody, and placing the anti-nuclease antibody in an *in vitro* translation reaction.
38. The method of claim 37, wherein the *in vitro* translation reaction comprises at least one

nuclease.

39. The method of claim 37, wherein the *in vitro* translation reaction comprises RNA.
40. The method of claim 37, wherein the *in vitro* translation reaction is further defined as a transcription/translation reaction.
41. The method of claim 40, wherein the *in vitro* translation reaction comprises both DNA and RNA.
42. The method of claim 37, wherein the anti-nuclease antibody is a anti-ribonuclease antibody.
43. The method of claim 37, wherein the anti-nuclease antibody is an anti-deoxyribonuclease antibody.
44. The method of claim 37, wherein the anti-nuclease antibody binds to S1 nuclease or micrococcal nuclease.
45. The method of claim 37, further comprising obtaining a second nuclease inhibitor and placing the second nuclease inhibitor in the *in vitro* translation reaction.
46. The method of claim 45, further defined as comprising obtaining a nuclease inhibitor cocktail comprising at least the anti-nuclease antibody and the second nuclease inhibitor and placing the cocktail in the *in vitro* translation reaction.
47. The method of claim 45, wherein the second nuclease inhibitor is a second anti-nuclease antibody.
48. The method of claim 45, wherein the second nuclease inhibitor is human placental

ribonuclease inhibitor, a bovine ribonuclease inhibitor, a porcine ribonuclease inhibitor, diethyl pyrocarbonate, ethanol, formamide, guanidinium thiocyanate, vanadyl-ribonucleoside complexes, macaloid, sodium dodecyl sulfate, ethylenediamine tetraacetic acid, proteinase K, heparin, hydroxylamine-oxygen-cupric ion, bentonite, ammonium sulfate, dithiothreitol,  $\beta$ -mercaptoethanol, cysteine, dithioerythritol, tris (2-carboxyethyl) phosphene hydrochloride,  $Mg^{+2}$ ,  $Mn^{+2}$ ,  $Zn^{+2}$ ,  $Fe^{+2}$ ,  $Ca^{+2}$ , or  $Cu^{+2}$ .

49. The method of claim 37, further defined as obtaining a lysate and employing the lysate in the *in vitro* translation reaction.

51. (New) The method of claim 18, wherein the third anti-nuclease antibody binds to one or more of RNase A, a member of the RNase A family, RNase B, RNase C, RNase 1, RNase T1, RNase T2, RNase L, a member of the RNase H family, a member of the angiogenin RNase family, eosinophil RNase, a micrococcal nuclease, a member of the mammalian ribonuclease 1 family, a member of the ribonuclease 2 family, a messenger RNA ribonuclease, 5'-3' exoribonuclease, 3'-5' exoribonuclease, a decapping enzyme, a deadenylase, RNase P, RNase III, RNase E, RNase I,I\*, RNase HI, RNase HII, RNase M, RNase R, RNase IV, F; RNase P2,O, PIV, PC, RNase N, RNase II, PNPase, RNase D, RNase BN, RNase T, RNase PH, OligoRNase, RNase R, RNase Sa, RNase F1, RNase U2, RNase Ms, or RNase St.

52. (New) The method of claim 47, further comprising obtaining at least a third anti-nuclease antibody and placing the at least a third anti-nuclease antibody in the *in vitro* translation reaction.

53. (New) The method of claim 52, wherein the third anti-nuclease antibody binds to one or more of RNase A, a member of the RNase A family, RNase B, RNase C, RNase 1, RNase T1, RNase T2, RNase L, a member of the RNase H family, a member of the angiogenin RNase family, eosinophil RNase, a micrococcal nuclease, a member of the mammalian ribonuclease 1 family, a member of the ribonuclease 2 family, a messenger RNA ribonuclease, 5'-3' exoribonuclease, 3'-5' exoribonuclease, a decapping enzyme, a deadenylase, RNase P, RNase

III, RNase E, RNase I,I\*, RNase HI, RNase HII, RNase M, RNase R, RNase IV, F; RNase P2,O, PIV, PC, RNase N, RNase II, PNPase, RNase D, RNase BN, RNase T, RNase PH, OligoRNase, RNase R, RNase Sa, RNase F1, RNase U2, RNase Ms, or RNase St.

54. (New) The method of claim 52, wherein the at least a first anti-ribonuclease antibody is an anti-RNase A antibody, the at least a second anti-ribonuclease antibody is an anti-RNase 1 antibody, and the at least a third anti-ribonuclease antibody is an anti-RNase T1 antibody.

55. (New) The method of claim 5, wherein the RNA is produced in the admixture.